

NICU/Paeds: Sucrose

Presentation:	Sucrose 24% oral solution in 2ml containers																
Indication:	Analgesia for children and neonates, undergoing intravenous cannulation or blood sampling.																
Dose:	<p>Initial dose: 0.2ml Doses of 0.2ml may be repeated every 2 minutes as necessary, up to maximum doses as per table.</p> <table border="1"> <thead> <tr> <th>Corrected Gestational age</th> <th>Initial dose</th> <th>Incremental doses</th> <th>Maximum total dose</th> </tr> </thead> <tbody> <tr> <td>≤31⁺⁶</td> <td>0.05 – 0.1 ml</td> <td>0.05 – 0.1 ml</td> <td>0.4mL</td> </tr> <tr> <td>32 weeks – 36⁺⁶ weeks</td> <td>0.2mL</td> <td>0.2mL</td> <td>1mL</td> </tr> <tr> <td>>37 weeks</td> <td>0.2mL</td> <td>0.2mL</td> <td>2mL</td> </tr> </tbody> </table> <p>** Peak action is 2 minutes, with effects lasting between 5 – 10 minutes **</p>	Corrected Gestational age	Initial dose	Incremental doses	Maximum total dose	≤31 ⁺⁶	0.05 – 0.1 ml	0.05 – 0.1 ml	0.4mL	32 weeks – 36 ⁺⁶ weeks	0.2mL	0.2mL	1mL	>37 weeks	0.2mL	0.2mL	2mL
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Route of administration:	Give orally by placing the dose on the tongue																
Instructions for preparation and administration:	<p>Administer 1-2 minutes prior to the procedure/painful stimulus.</p> <p>Can be administered through using a pacifier or directly dripped (one drop at a time) onto the tongue from the vial, or by using an oral syringe.</p> <p>It should not be given via nasogastric tube as this has been proven to be ineffective.</p> <p>This solution is a single use only preparation; do not store and re-use open container. Discard residual solution.</p>																
Prescribing	<p>Neonates: prescribe on 'when necessary' side of paper prescription chart</p> <p>Paediatrics: Prescribe on Lorenzo as PRN</p>																
Cautions and contraindications:	<p>Not be given to babies who are not on established feeds unless clinically stable.</p> <p>Sucrose should not be administered to neonates and infants who are intolerant to fructose or sucrose, paralysed, allergic to corn or corn products, hyperglycaemic, born to diabetic mothers, have suspected or confirmed necrotising enterocolitis, or babies of opiate dependent mothers, glucose-galactose malabsorption, muscle relaxed neonates, critically ill infants receiving appropriate IV analgesia.</p> <p>Avoid in patients with gastrointestinal abnormalities.</p> <p>Monitoring Parameters: heart rate, respiratory rate, pain relief</p>																
Additional Comments:	<ul style="list-style-type: none"> • Pain score to be completed as per procedure, respiratory, and heart rate. • Coughing, choking, gagging, and transient oxygen desaturations have been reported. When using the syringe method of administration, the solution should be applied carefully to the tongue one drop at a time. • Some evidence that adverse effects of sucrose, including temporary increase in neurobiologic risk score, is more frequent in premature babies (particularly if <32 weeks gestation) 																

Note: The contents of this monograph should be read in conjunction with information available in the BNFC and Medusa

References:

1. Neonatal Formulary, Drug Use in Pregnancy and the First Year of Life, Sixth Edition, Page 246.
2. Evelina London Paediatric Formulary, Available online: <http://cms.ubqo.com/public/d2595446-ce3c-47ff-9dcc-63167d9f4b80/content/da284010-34a2-47fb-99bd-90f6e8457bdf>. Last accessed 03.02.20
3. Greater Glasgow & Clyde Paediatric Guidelines, Available online: <https://www.clinicalguidelines.scot.nhs.uk/ggc-paediatric-guidelines/ggc-guidelines/neonatology/oral-sucrose-for-procedural-pain/>. Last accessed 03.02.20
4. Neonatal guidelines 2017 – 2019 Staffordshire, Shropshire and Black Country Network, Pain Assessment and Management, Page 249.
5. Paediatric and neonatal dosage handbook, page 1979.

Document control sheet

GUIDELINE NUMBER	Sucrose Version 2 February 2020
AREA IN WHICH THIS MONOGRAPH APPLIES	Paeds/NICU

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Harriet Hughes	Advanced Pharmacist, Women's & Children's	20/02/20
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Dayana El Nsouli	Shift Working Clinical Pharmacist	25/03/20

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	Update to dosing schedule	25/03/20
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